# *SYPHILIS*

## I. IDENTIFICATION

A. CLINICAL DESCRIPTION: A sexually transmitted disease caused by the spirochete *Treponema pallidum*. The infection usually progresses to four stages:

- **Primary Syphilis,** characterized by a chancre (ulcer) that appears 10 to 90 days, with an average of 21 days after exposure. The chancre appears at the site of exposure and heals within one to four weeks, even without treatment. Infected patients spread infection to their sex partner most often when they are in their primary syphilis stage.
- **Secondary Syphilis**, characterized by eruptions of the skin and/or mucous membranes that are generally infectious. Generalized adenopathy may be present. The skin eruptions can appear as a variety of different rashes and may begin while the chancre is present. However, it usually starts four weeks after the chancre resolves and can occur up to six months after inoculation. The rash resolves in two to six weeks, but may recur with infectious lesions for the first year of the disease. The most common secondary rash is a maculopapular rash of the palms and soles. Two very contagious manifestations of secondary syphilis are mucous patches and condylomata lata. *Treponema pallidum* is abundant in these lesions and sex partners can be easily infected.
- **Early Latent Syphilis**, occurs when the primary and secondary symptoms resolve and lasts throughout the first year of infection. This stage represents the asymptomatic stage of the infection. However, all serologic tests for syphilis will be positive.
- **Late Latent Syphilis** occurs in persons who have been infected with syphilis for more than one year. This stage is non-infectious, and the patient displays no signs or symptoms.
- **Late Syphilis** characterized by manifestations that occur 5 to 20 years after infection. They include gummas; destructive lesions of the skin, viscera, bone and mucosal surfaces; cardiovascular syphilis, destructive lesions of the aorta; and neurosyphilis, destruction of areas of the central nervous system including the brain. Late syphilis can cause death or permanent disability. Late syphilis manifestations occur in 20 - 25% of patients infected with syphilis who do not receive an adequate regimen of syphilis therapy.

**Congenital** infection often results from pregnant women with untreated primary, secondary and early latent syphilis. It can also result, with less frequency, from women who have untreated late latent to late syphilis. This infection may cause stillbirth, infant death, or severe complications that do not manifest and become apparent until much later in life. They include interstitial keratitis, saber shins, Hutchinson's teeth, saddlenose, and deafness. The presence of the lesions caused by primary and secondary syphilis increases risk of acquiring HIV infection. Congenital syphilis is classified in 2 separate stages:

1) newborns less than one year old.

2) Persons over one year of age with congenitally acquired infection.

B. REPORTING CRITERIA: Laboratory confirmation.

C. LABORATORY CRITERIA FOR CONFIRMATION:

- Laboratory confirmation of *T. pallidum* by darkfield microscopy, by reactive serology, or by clinical manifestations of acquired infection.

D. KENTUCKY CASE DEFINITION: A clinically compatible case that is laboratory confirmed.

## II. ACTIONS REQUIRED / PREVENTION MEASURES

A. KENTUCKY DISEASE SURVEILLANCE REQUIRES URGENT NOTIFICATION OF PRIMARY, SECONDARY, EARLY LATENT OR CONGENITAL SYPHILIS: REPORT TO THE LOCAL OR STATE HEALTH DEPARTMENT within 24 hours of the identification of a case or suspected case. Other stages of syphilis require routine notification within 5 business days.

B. EPIDEMIOLOGY REPORTS REQUESTED:

1. Kentucky Reportable Disease Form - EPID 200 (Rev. Jan/03).

**Note:** Section labeled "Additional Information for Sexually Transmitted Diseases" must be completed.

C. PREVENTION MEASURES:

- Pregnant women must receive syphilis serologies on the first prenatal visit, and more often if indicated or deemed necessary by the attendant caregiver.
- Although treatment ends infectiousness, a pregnant woman treated less than 30 days before delivery can have an infected infant and therefore a full evaluation of the infant is recommended. These recommendations are outlined in the CDC 2002 Treatment Guidelines (Pages 18-30).

D. PUBLIC HEALTH INTERVENTIONS:

- Patients treated for early syphilis should be advised to have follow-up serologies at six-month intervals for two years.
- Patients diagnosed with syphilis or identified as contacts, suspects or associates, should receive educational information about the disease, be counseled on ways to reduce their risk of acquiring STDs, including HIV, and offered an HIV test.
- Patients with primary symptoms should be interviewed for all sexual contacts within 90 days prior to onset of symptoms. Patients with secondary symptoms should be interviewed for all contacts in the six months prior to onset of symptoms. Patients with early latent syphilis should be interviewed for all contacts in the year preceding treatment.

- All patients and contacts should be cluster interviewed to identify other individuals at risk. All individuals at risk should be counseled on risk reduction and referred for examination and treatment if appropriate.
- All interviews should pursue screening sites in areas of high incidence or where there is a danger of an outbreak.
- All sexual contacts within 90 days should be preventively treated. Those over 90 days should be tested and only treated if a case.

## III. CONTACTS FOR CONSULTATION

A. KENTUCKY SEXUALLY TRANSMITTED DISEASE CONTROL PROGRAM: 502-564-4804.

B. KENTUCKY DEPARTMENT FOR PUBLIC HEALTH, COMMUNICABLE DISEASE BRANCH: 502-564-3261.

C. KENTUCKY DEPARTMENT FOR PUBLIC HEALTH, DIVISION OF LABORATORY SERVICES: 502-564-4446

## IV. RELATED REFERENCES

1. Chin, James, ed. SYPHILIS. In: Control of Communicable Diseases Manual. 17th ed. Washington, DC: American Public Health Association, 2000: 481-487.

2. 1998 Guidelines for the Treatment of Sexually Transmitted Diseases, MMWR Vol. 47(RR-1)

3. Sexually Transmitted Disease Clinical Practice Guidelines, 1991, CDC.